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**MASSACHUSETTS
BICYCLE
ADVISORY BOARD
REPORT**

GOVERNMENT DOCUMENTS
COLLECTION

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Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Management



June 29, 1989

**Bicycle
Advisory Board**

225 Friend Street
Boston
Massachusetts
02114

Dear Member of the General Court:

Chapter 707 of the Acts of 1987, created a Bicycle Advisory Board in the Department of Environmental Management to advise agencies on matters pertaining to bicycling in Massachusetts.

The Board is pleased to submit this initial report, which contains its findings and recommendations related to discussions at our monthly meetings since September 1987.

The Board will continue to meet and prepare recommendations on improvements to traffic laws; carry out further research into funding sources for bicycle programs; prepare bicycle education and enforcement materials to distribute to the general public; investigate statewide moped issues; sponsor a "role-model helmet campaign" in two communities this Spring to coincide with Bicycle Safety Month and a third this Fall in Chelsea; and complete a variety of other unfinished business, including drafts of Legislation.

If you have any comments related to this document, please contact Daniel O'Brien at 727-3160. Thank-you.

Commonwealth
of Massachusetts

Richard E. Kendall, Commissioner
Dept. of Environmental Mgt.

Jane Garvey, Commissioner
Dept. of Public Works

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INTRODUCTION

In the United States, there are over 78 million bicyclists of all ages. Bicycling serves as healthful exercise and recreation as well as transportation. Bicycle use is growing by about 15 percent per year, with the most rapid increase among adult riders.

Bicycling has also diversified over the past few years. Traditional road racing and adult recreational riding have grown steadily, but the all-terrain or mountain bike has opened up new horizons along with new problems on trails formerly used only by hikers and horseback riders. Bicycle commuting has expanded four times in the past fifteen years; today, over two million Americans commute to work by bicycle, accounting for a significant reduction in air pollution, dependence on foreign fuel sources, and traffic congestion. Accounting for bicycles in the design of transportation projects can encourage this desirable trend.

Children's bicycling has diversified too, with the popularity of BMX and Freestyle bicycles, designed for rugged on-and off-road use.

A comprehensive program to take advantage of the potential of bicycling includes the four E's: Engineering, Education, Enforcement and Encouragement. The Bicycle Advisory Board's report touches on all of these areas.

One major concern of the report is to prevent accidents and injuries. More than 1000 people die each year from bicycle-related injuries--75 percent as a result of head injury. Nearly half of these deaths occur among children. The most common cause of sports or recreational injury in the United States is bicycling.

In Massachusetts, there were twenty-seven bicycle-related deaths over a two-year period (1987-1988); fifteen occurred to children between the ages of five and fourteen. It is estimated that an additional 14,118 children will require hospital treatment this year as the result of a bicycle injury.

With these statistics in mind, the Massachusetts Bicycle Advisory Board is committed to getting the message out that "bicycle helmets save lives". As outlined in this report, the Board is preparing educational materials, sponsoring helmet campaigns statewide, and researching many other bicycle-issues in an effort to curtail injuries and deaths and improve the climate for bicycling in Massachusetts. This report begins to address these issues and makes certain recommendations related to administrative policy and future legislation.

Massachusetts Bicycle Advisory Board

The Massachusetts Bicycle Advisory Board is comprised of five individuals appointed by the Governor with a demonstrated active interest or expertise in the various aspects of bicycling, including the industry, and eight representatives of state agencies whose activities directly or indirectly affect the bicycling environment or the interests of bicyclists. These agencies include the Executive Office of Environmental Affairs, the Department of Environmental Management, the Department of Public Works, the Metropolitan District Commission, the Department of Public Safety, the Registry of Motor Vehicles, the Metropolitan Area Planning Council, the Department of Public Health and the Central Transportation Planning Staff.

Legislations Charge To The Board

In Chapter 707 of the Acts of 1987, the Board was directed to:

- * advise departments on matters relative to bicycle transportation.
- * make recommendations relative to the use of tax incentives for bicycle parking equipment.
- * consider the use of zoning to promote bicycle transportation.
- * advise the MDPW on matters relative to Chapter 90E, Bikeways Program including education and safety measures.
- * file an initial report with the General Court together with drafts of legislation necessary to carry its recommendations into effect.

The Board's Approach

The Massachusetts Bicycle Advisory Board has examined a broad range of bicycling issues, activities and problems and has recommended in this report a number of measures which could be affected through government action and private cooperation.

At monthly meetings since September of 1987 we have discussed the various aspects of bicycling in Massachusetts and we have tried to determine the problems which confront bicyclists and bicycling, as well as the various potential remedies which would lead to the solution of those problems and encourage bicycling.

The Board drew on the expertise of its members to identify conditions which adversely affect bicycling and people's attitudes towards bicycling. This included discussion of topics such as planning to facilitate the use of bicycles for transportation in the construction and reconstruction of roadways in Massachusetts; bicycle safety, bicycle helmet use, education and enforcement; bicycle facilities; liability issues; and a host of other bicycle matters. Although many disciplines are represented, there is a common goal to make bicycling safe and enjoyable for all in Massachusetts.

MASSACHUSETTS BICYCLE ADVISORY BOARD RECOMMENDATIONS

The following are recommendations the Bicycle Advisory Board developed based on the expertise of the Board members for consideration by the General Court. More specifics related to these recommendations will follow in a final report. A State commitment is necessary to ensure that commuting and recreational bicycling are both safe and enjoyable. These recommendations are intended to address specific needs of bicyclists in the Commonwealth.

A Full-Time Bicycle Coordinator and Bicycle Program Office

Transportation projects in Massachusetts usually are conceived at the local level, with coordination of regional planning agencies, and proceed through MDPW district offices to review by a statewide committee. Opportunities for bicycle-friendly design features in roadway construction projects are not always considered. A Bicycle Coordinator's position to review road construction and reconstruction proposals would identify bicycle-compatible roadways in Massachusetts.

The majority of bicycle-related projects in Massachusetts are undertaken by the Massachusetts Department of Public Works, the Department of Environmental Management, and the Metropolitan District Commission. The Bicycle Advisory Board identified over thirty-two million dollars of bikeway projects being planned statewide. There is a need for much greater coordination. Often bicycle-related projects do not link with one another, and do not reflect statewide priorities or appropriate standards for safe design. A Bicycle Coordinator to assist in prioritizing and linking bikeways would be beneficial to bicycling for both commuting and recreation.

States that have taken effective action to improve conditions for bicycling all have a bicycle program office, typically with a bicycle coordinator, engineer and additional staff of one or two persons. (For example: Oregon, Florida, North Carolina).

The Board recommends the establishment of a full-time Bicycle Coordinator's position. The Bicycle Coordinator is to have the responsibility of coordinating transportation planning, construction and reconstruction projects among the various agencies. The Bicycle Advisory Board will recommend where the position should be located in its final report.

A Bicycle Coordinator's position was in fact created in the Department of Environmental Management at one time, (see State Budget FY'81, Chapter 329, item no 2120-0302) but due to delays in scheduling, it was never filled.

As a stopgap measure until a bicycle coordinator's office is created, to make sure bicycle travel is being considered in transportation projects in Massachusetts, the Bicycle Advisory Board proposed the following amendment to the Transportation Bond Issue (Chapter 15, Acts of 1988) which is now law:

"In planning for the funding of a project, consideration shall be made, to the extent feasible, to accommodate and incorporate provisions to facilitate the use of bicycles as a means of transportation."

Consideration of Bicycling in Transportation Planning

It is extremely important that bicycle travel be considered early on in the design of transportation projects as bicycling for transportation is on the rise in Massachusetts and nationally; and opportunities to facilitate bicycle use are often lost early in the design process.

The Board makes the following specific recommendations for bicycle-related features of transportation projects:

Conformity to AASHTO Guidelines in Facility Construction

The Board recommends the strengthening of the review process so that future bicycle facilities conform to AASHTO (American Association of State Highway and Transportation Officials) Guidelines, to reduce safety problems and to promote efficient bicycle travel.

Greater Recognition of and Planning for On-road Bicycle Use

The Board's consensus is that one of a Bicycle Coordinator's main responsibilities would be to recommend and develop on-road bicycle-related improvements. The opportunity for such improvements is lost if bicycles are not considered early in the design cycle of a highway construction or maintenance project. Such improvements are generally of low cost and benefit all road users, not just bicyclists. Examples of such improvements include bicycle-safe storm grates; restriping to provide wide outside lanes; intersection improvements for smoother traffic flow; and construction of shoulders, which increase traffic capacity, reduce accidents and cut maintenance costs.

Bicycle-Sensitive Traffic-Signal Actuators

The Board recommends that bicycle-sensitive traffic-signal actuators (vehicle presence detectors) be specified for use in Massachusetts, and recommends further study of them by the Department of Public Works.

Review of Bicycle-Exclusion Policy

The Board agrees to include the statement as written by member John Allen in his memorandum of April 12, 1988 regarding policy on posted exclusions of bicycles from certain roadways (see Appendix 1).

Intermodal Considerations

In many parts of the United States, Europe and Japan, the bicycle's potential is enhanced through coordination with other modes of transportation.

Bicycling has great potential as a feeder mode for public transportation. Policies and programs which allow bicycles to be carried on public transportation or parked securely at public transportation stations can increase the use of public transportation while reducing parking problems at stations and traffic congestion on feeder roads.

Many such programs have been implemented in Massachusetts; however, there are numerous additional opportunities which remain unexploited.

All major Massachusetts ferry systems carry passengers' bicycles for a nominal charge. It is possible to travel by ferry from Boston to Hingham, Provincetown or Martha's Vineyard; from Hyannis, Woods Hole and New Bedford to Martha's Vineyard and Nantucket. Boston Harbor ferry service has recently been expanded to include a link between the Boston waterfront and East Boston/Logan Airport, bridging a gap in the bicycle-route network which has existed since the harbor tunnels replaced earlier ferry services decades ago.

The Cape Cod Railroad, provided in recent years, a good example of the potential of bicycles and public transportation. This railroad, connecting Braintree and Hyannis, regularly carried passengers' bicycles in a baggage car. The MBTA allows bicyclists who have enrolled in a special permit program to take their bicycles with them on rapid-transit lines but only on Sundays. This program interfaced with the Cape Cod Railroad at the Braintree Red Line stop.

Bicycle parking facilities are available at many MBTA stations, though the quality of these facilities varies widely.

Amtrak will transport crated bicycles, though only on trains which have baggage cars. The passenger must buy an Amtrak box at the station for the nominal charge of \$4.00. Amtrak is in the process of reevaluating this policy and is currently, as an experiment, allowing uncrated bicycles on some of its trains in the western United States, as is done in most of Western Europe.

Most Massachusetts intercity bus lines will transport uncrated bicycles on a space-available basis when there is an empty baggage compartment under the bus. This service is not completely reliable, however, because sometimes all baggage compartments are in use, and some bus companies, notably Greyhound, have a policy requiring bicycles to be crated for shipment. However, Greyhound does not supply boxes, making it impractical for a bicyclist to ride to the bus station.

All commercial airlines will transport bicycles. Policies vary. Most airlines require boxes, but enough provide boxes so it is usually possible to obtain one at a major airport.

The major areas in which improvement are needed are:

- * A policy of recognition and encouragement of the way bicycling and public transportation support each other. All other improvements follow from this policy.
- * Recognition of the special importance of public transportation where it bridges sections of the road network where bicycles can not travel. To give an example, bicycles can not travel in the Boston harbor tunnels. For this reason, the cross-harbor ferry service is especially important to permit bicycle access to and from East Boston and the Airport.
- * Parking at public transportation facilities. This is generally long-term parking for commuters who will be away all day or out-of-town travelers who may be away for even longer. Secure parking is crucial in these cases. Bicycle racks within the view of a parking attendant should be available.
- * Information for bicyclists on routing in and out of major public transportation facilities such as airports. For example, it is possible to get in and out of Logan Airport on a bicycle, but no maps or route signs at the airport or in airport pamphlets indicate the bicycle route to East Boston streets or to the cross-harbor ferry. The route is different from the one motorists use, which leads to a limited-access highway.
- * A policy forbidding loss of bicycle access to public transportation facilities. As an example, there is some threat that the upcoming third-harbor-tunnel project might close off access from the cross-harbor ferry to East Boston streets and from East Boston streets to the Airport. Either of these possibilities would seriously discourage intermodal bicycling, by preventing people from riding to the airport and East Boston.

Dissemination of the Board's Findings

The Board is concerned that its recommendations be disseminated to constituencies with an interest in bicycling: for example, statewide organizations of bicyclists, police safety officers, educators and the statewide planning community. The Board's recommendations should be distributed in writing, and also various Board members have agreed to give presentations at statewide conferences of these organizations.

The Board intends to distribute bicycle safety, education and enforcement materials to the following organizations:

- * Massachusetts Safety Officer's Association
- * Parent and Teacher Organizations
- * Department of Education
- * Local School Committees
- * Retail Department Stores
- * Criminal Justice Training Council
- * Bicycle Shops

The Board recommends the preparation of information on bicycle laws, and the basis for those laws, along with accepted rules for bicycling, to be distributed to college students as part of the registration materials for entering students. The Board intends to prepare the materials, try to provide bicycle discount coupons to entice students to read the materials, and forward them to schools for distribution.

Bicycle-Safety Media Events

The Board recommends the strengthening of a program throughout the Commonwealth to bring about a safer climate for all users travelling under their own power. The program should include but not be limited to the following:

- * public service announcements on television and in newspapers identifying the rights and responsibilities of all road users emphasizing those affecting bicyclists.
- * designation of May of each year as bicycle month and coordinate events and activities among State agencies.

Establishment of Role Models

The Board recommends the establishment of a "role-model campaign" in which responsible bicyclists would sign a pledge to obey all the traffic laws of the Commonwealth and be presented with a distinctive helmet at media events in May of each year to coincide with the proposed Bicycle Month.

Collection of Data and Research

The Board recommends continuing data collection and research to monitor patterns of bicycle usage and accidents, as a basis for future transportation planning decisions.

Statewide, Voluntary Bicycle Registration

In order to improve the recovery of stolen bicycles, and to aid police in the investigation of crime, the Board recommends a statewide bicycle registration program funded by registration fees.

Bicycle registration programs are presently handled by towns and cities, with little coordination between them. If a stolen bicycle is recovered outside the town in which it was registered, there is little hope of identifying it. This problem took on a tragic dimension recently in Rhode Island when the bicycle belonging to a missing boy was found in a neighboring town. Police were unable to identify it for twelve hours. It later turned out that the boy had been murdered, and that failure to identify the bicycle had delayed the investigation.

Statewide registration can reduce such problems and also provide funding for bicycle programs. Such registration should be voluntary; the incentive of improved recovery rates for stolen bicycles has made it succeed in the several states where it has been tried, notably Wisconsin. Mandatory registration, on the other hand, has been generally unsuccessful in the United States.

Registration could be carried out through the cities and towns, or through the National Bicycle Registry, a private company which could work under contract to the cities and towns. A central data bank is essential for this registration plan to be successful. The means for implementation are still under discussion.

A Steady Source of Funding for Bicycle Programs

The Board points out the need for a steady source of funding for bicycle-related governmental programs and projects. Potential sources include the statewide registration program (see above); equitable tolls for use of facilities such as toll bridges; and a State budget item for the Bicycle Coordinator's Office. Board member Alan McClennen has offered to carry out further research into funding sources. Board members pointed out that sales taxes on bicycle equipment purchases already contribute to the State's revenues, justifying an amount being set aside for bicycle programs.

The Statewide Comprehensive Outdoor Recreation Plan

This comprehensive open space and outdoor recreation plan entitled "Massachusetts Outdoors! For Our Common Good 1988-1992" which was undertaken by the Executive Office of Environmental Affairs, with the help of an advisory committee, supports our recommendations for a Bicycle Program Office.

Recreation activities in highest demand in Massachusetts are water-based and trail-oriented activities, thus requiring access to water or a network of trails, bikeways and paths. Bicycling is a highly popular activity and is pursued close to home, often on municipal streets. The development of bikeways or bike trails and designated bike routes with appropriate improvements would improve access to opportunities for bicycling in attractive surroundings. The improvement of trail systems would also meet the needs of many walkers, joggers and runners. Since participation in these trail-related activities is high and often takes place close to home, local and State government will need to join forces to be effective in providing well-placed and adequately designed new bicycle opportunities throughout the Commonwealth.

The Bicycle Advisory Board recommended the following policies that were included in the 1988-92 Statewide Comprehensive Outdoor Recreation Plan entitled "For Our Common Good".

- * The Department of Environmental Management and the Metropolitan District Commission will work with bicyclists' organizations, the Bicycle Advisory Board and the Statewide Trails Committee to develop a policy for off-road bicycle use on State lands.
- * The Department of Environmental Management will work with the Executive Office of Transportation and Construction to develop a stable source of funding for printing the Massachusetts Bicycle Map.
- * The Department of Environmental Management will consider the feasibility of setting aside primitive campsites at state parks for hikers and cyclists, at reduced rates, to encourage bicycle tourism in the State.
- * The Department of Environmental Management will prioritize road improvements at major recreation sites, to provide wide lanes or paved shoulders where traffic is heavy to improve traffic flow and pedestrian and bicycle safety.

- * The Department of Environmental Management will work with the Bicycle Advisory Board to coordinate bicycle projects with all State agencies and seek funding for an interagency bicycle office. This office would develop policies and actions for statewide bike trails, facility maintenance standards and develop and distribute rules and regulations for safe bicycling.
- * The Department of Environmental Management, in cooperation with private interest, will conduct a feasibility study for the funding and development of a velodrome/bicycle track for statewide recreational and competitive use.

Support for Measures Against Drunk Drivers

The Board supports the Governor's efforts and other initiatives to combat drunk drivers, who are implicated in a large percentage of serious and fatal bicycle accidents.

Bicycle Education, Enforcement and Safety

The Board recommends that the Registry of Motor Vehicles continue to include a section on bicycling, and questions and answers related to bicycle law and safety, in future driver's manuals and examinations.

The Board also makes the following recommendations for educational programs:

Bicycle Education in Elementary Schools

The Board recommends the Department of Education seek funding to fill the vacant Director of Physical Education position to carry out the statutory mandate of Chapter 69 Section 1A. If it is not possible to fill that position due to budgetary constraints, the Department of Education, at a minimum, should provide bicycle education materials to elementary schools in Massachusetts, and encourage the teaching of a bicycle-safety course during a physical-education class. The Board would prepare the materials.

Bicycle Programs at Colleges and Universities

The many institutions of higher education in Massachusetts pose a particular challenge and opportunity for bicyclist education. Bicycling as a means of transportation is affordable on a student budget; many colleges and universities place restrictions on student driving or have a limited number of automobile-parking spaces for students. For these reasons, among others, colleges and universities tend to be centers of bicycling activity.

This situation brings major benefits and a few problems for the institutions and the surrounding communities. Student transportation by bicycle saves colleges and universities the space and expense of parking for automobiles. Communities benefit from the ability of students to patronize businesses which they can reach by bicycle, and from the reduced traffic congestion and parking demand compared with student use of automobiles.

On the other hand, student bicyclists often violate traffic laws, sometimes have accidents, and always create a need for bicycle parking and bicycle routes both on and surrounding the campus. Often, this is a "silent problem" -- one that is not addressed in an organized way either by the institution or by the community. Yet it has its costs. Most colleges and universities carry health insurance for their students, and maintain campus police and ambulance services. Reducing bicycling injuries can save money on these services.

Fortunately, colleges and universities have a special ability to influence their students' activities, both on campus and in the surrounding community. Colleges and universities can easily distribute information to students and can impose rules which go beyond the requirements of the law.

Elements of a program to improve the safety of college bicyclists would include:

- * Information on bicycling to be distributed with registration packets. This would include information on riding technique, on bicycle resources such as bike shops and parking areas, and on campus regulations and traffic laws which apply to bicyclists.
- * A requirement that all university-affiliated bicyclists wear hardshell helmets when riding on campus.
- * Training of campus police in bicycle enforcement, and assigning a bicycle detail.
- * Integration of planning for bicycle routes and bicycle parking into campus development projects.

- * Cooperation and consultation with the community in enforcement and in planning for bicycle traffic.

The Advisory Board recommends the development of a pilot program incorporating these elements, to be tried out at one or more campuses. This program would become the basis for training and implementation of similar programs at other campuses throughout the state.

This program would improve bicycling conditions for student bicyclists; but as these student bicyclists are future community leaders, they could be expected to expand understanding of bicycling in the communities where they settle after graduation.

Bicycle Law-Enforcement Program

The Board recommends that the Criminal Justice Training Center vigorously seek funding to teach a course in bicycle law enforcement to Massachusetts Police Officers. This course could be modeled after the very successful program taught in Jacksonville, Florida.

The Board proposes the following steps to make it easier for police to enforce traffic laws as they apply to bicyclists:

- * revision of statutes relative to bicyclists providing identification when stopped by police.
- * increase in penalties which are now much too low.
- * pilot bicycle-law-enforcement programs in communities where there is heavy bicycle use; notably, communities with colleges and universities such as Cambridge and Amherst. Cooperation among state, local, college and university police departments in these communities is necessary to carry out these programs.

Regulation of Bicycle Couriers

The Board recommends mandatory licensing of bicycle couriers, with an education program and license test, since the increase in use of bicycles by couriers in major cities has led to major conflicts between couriers and other street users, especially pedestrians.

Bicycle Rules of the Road

The Board supports the following up-graded Bicycle Rules of the Road as provided by the Registry of Motor Vehicles and discussed at our November 1988 meeting:

Because the roads have to be shared by many people and vehicles, common rules have been developed so that road users will generally know what to expect from others sharing the road. Massachusetts' Law treats bicycles as vehicles and allows bicyclists to use all streets and roads in the State except expressways and limited-access highways where signs prohibiting bicycles are posted. Under the law bicyclists have the responsibility to follow the same rules of the road as motorists.

The top cause of bike-car accidents is bicyclists riding on the left side of the road (against traffic) . Most bike-car accidents (51%) happen at intersections. Another big cause of accidents is bicyclists (and motorists) pulling out of driveways into traffic without stopping to look. When bicyclists or motorists do something unexpected or unpredictable, they are risking injury to themselves or others. In other words, bicyclists are expected to be predictable on the road. Here are the main Rules of the Road you'll need to ride predictably:

1. Ride on the right with the flow of traffic. Pass on the left like any vehicle operator. You may pass on the right but use extreme caution because drivers do not expect you there.
2. Ride single file, and in a straight line. Do not weave in and out between parked cars. Before changing lane position, LOOK BACK to make sure it is safe.
3. Stop at stop signs and red lights. Obey all other traffic signs and signals, too. Yield right of way at a stop sign or when making a legal right turn on red.
4. Before turning, signal by hand, LOOK BACK and change to the appropriate lane position. You may use either hand for a right-hand signal. Make a left turn from the center of the road, or you may walk in the crosswalk as a pedestrian.
5. Give the right of way to pedestrians.
6. Give a clear warning (bell, horn or voice) when passing pedestrians or other cyclists or whenever needed for safety.
7. Never carry passengers except in an approved child seat or trailer.
8. Check your brakes often.

9. If you ride at night, equip your bicycle with a white headlight, red taillight or rear reflector, pedal reflectors and reflective material on both sides. You need lights even when riding under streetlights, because reflectors light up only for drivers with their headlights aimed straight at you.
10. Do not adjust handlebars above your shoulders or alter the front fork of the bike.
11. Do not ride on express or limited access highways where signs prohibiting bicycles have been posted.
12. You may ride on the sidewalk outside business districts unless your city or town prohibits it, but you must give right of way to pedestrians.

Under Massachusetts law police officers may give a warning notice or a ticket to bicyclists who fail to follow the rules of the road. Wear your helmet! Three out of four fatal or disabling injuries in bicycle accidents are head injuries. A helmet is very cheap insurance against these injuries.

Bicycle Child Seats and Trailers

Special attention needs to be paid to child seats and trailers, which are involved in an increasing number of bicycle accidents. The Board recommends that both the child and the adult who is riding the bicycle wear hardshell helmets. These are now available in the small sizes and light weights needed for small children. At least one state, California, requires helmets by law for children carried in child seats. Every child carrier seat should be equipped with an effective seat belt, and should have a footguard to prevent the child's feet from contacting the bicycle's spokes. Every bicycle trailer used to carry passengers should have an effective seat belt and should be constructed to prevent the child's hands or feet from coming in contact with its wheels. "Roll bar" construction is also desirable and possible in a trailer. Trailer brakes are highly desirable but currently unavailable. Also, consideration should be made for special lighting and reflectorization requirements for trailers used at night, whether they carry passengers or cargo. Every trailer should have at least one red rear reflector or taillight. A trailer wider than the bicycle it follows, should be equipped with white or amber marker lights at the front and red taillights or reflectors at its rear corners. Most trailers are supplied with rear reflectors but not with front marker lights, which are essential to safe night-time use, especially on bikepaths.

STATE AGENCIES CONCERNED WITH BICYCLING IN MASSACHUSETTS

The following statements describe the responsibility of various State agencies toward bicycling.

Department of Public Works

Within the scope of the Department of Public Works' responsibilities for highway planning, construction and maintenance, Chapter 90 E Section 12 of the Massachusetts General Laws created a Bikeway Program in the Department of Public Works. The objective of the program is to provide funding for the development of bikeways and bicycle parking facilities in the Commonwealth. Usually, bikeway proposals are developed by interests in the local community. These interests are encouraged to organize into a body that is recognized by the municipality as the lead group in pursuing the proposed bikeway project, because the Department requires endorsement of the local elected officials. The proposal should be coordinated with the responsible regional planning agency, which can assist with basic planning and design information. With local-government support, and local police approval of safety considerations, and the Regional Planning Agency's recommendation, the proposal can be submitted to the MDPW District Highway Office for review. An acceptable project is submitted to the MDPW Boston Office for funding authorization. Funding is generally 75% State and 25% Municipal with the actual expenditures made by the municipality and reimbursed by the State. Regional facilities are funded 100% for construction. Bicycle parking facilities are eligible for 50% State/ 50% Municipal funding.

Since 1975 the Massachusetts Department of Public Works has received from State Transportation Bond Issues 13 million dollars for the bikeway program. To date, 33 communities have been recipients of bikeway projects for a total amount of 4.5 million dollars. Additionally, the Boston-to-Cape-Cod Bikeway was established, providing a 65-mile signed route. An additional 70 miles of signing from the Cape Cod Canal to Provincetown was completed during the fall of 1988. Municipalities which have received bikeway projects are:

Attleboro	Falmouth	Norwood
Agawam	Fitchburg	Oak Bluffs
Barnstable	Harvard	Somerset
Bourne	Harwich	Swansea
Braintree	Haverhill	Topsfield
Brewster	Lexington	Wareham
Dennis	Lincoln	Wayland
Duxbury	Montague	Wellesley
Eastham	Nantucket	Worcester
Easton	Northampton	Yarmouth
Edgartown	Norton	

Existing information indicates there are fourteen additional bikeway proposals known to be under consideration with total preliminary cost estimates of 32 million dollars. It should be remembered, however, that bicyclists may ride on all public ways in Massachusetts except on limited-access and express state highways where signs prohibiting bicycles have been posted. In this light, the DPW's responsibility toward bicyclists extends to most highway construction and maintenance projects.

The Department of Environmental Management

The Division of Forests and Parks of the Department of Environmental Management, one of the ten largest state-park systems in the United States, manages 265,000+ acres of state parks, forest and reservation lands statewide. Of the 175 park and recreation areas under its control, seven have separated bicycle paths totaling 167 miles. The Division also manages 967 miles of park roads under its jurisdiction.

The Division of Planning and Development is the contracting agent for the Division of Forests and Parks related to the rehabilitation and construction of bicycle paths in state forests, parks and reservations. The Division is also involved in planning, acquisition and construction of bicycle paths on former railroad rights-of-way abutting or in close proximity to DEM recreation areas.

Currently, three rail-trail bicycle paths are under design in a cooperative effort with the Massachusetts Department of Public Works. The Cape Cod Rail Trail extension to Wellfleet and the Five-College Bike Path in Amherst, Hadley and Northampton will be managed by the Division of Forests and Parks. The Minuteman Commuter Bikeway will be managed by the towns of Bedford, Lexington and Arlington.

Legislation signed by Governor Michael S. Dukakis in 1987 created the Massachusetts Bicycle Advisory Board within DEM to advise state agencies on matters related to bicycling. The Board is a key forum for developing new approaches to promoting bicycling both for recreation and for transportation, and the law opens the door for innovative planning, including zoning and tax incentives to encourage bicycling.

The Metropolitan District Commission

The Metropolitan District Commission's Division of Parks is involved in the acquisition, planning, construction, maintenance and interpretation of 14,700 acres of land in ten reservations around Greater Boston, a portion of the Boston Harbor Islands State Park, and other sites including parkways, rivers, streams, beaches and playgrounds. The MDC currently manages approximately 34 miles of bicycle paths and 158 miles of roads. Also, in various stages of planning and design are 31 additional miles of bicycle paths in the Alewife/Mystic area, the New Basin (behind the Boston Garden) and Upper Charles Lakes area, and in the cities and towns of Dorchester, Quincy and Hull.

Bicycles are generally permitted on MDC roads except where there are limited-access or express highways and signs prohibiting bicycles have been posted. Bicycles are otherwise permitted only in areas "specifically set aside for their use", according to MDC regulations. With the increasing popularity of off-road bicycling, the MDC is working with bicyclists' organizations to develop a policy for responsible off-road bicycle use in MDC reservations.

The Department of Public Safety

The Department of Public Safety supervises several divisions and boards responsible for law enforcement and the protection of lives and property within the Commonwealth. The Commissioner of the Department of Public Safety supports the establishment of a bicycle-law-enforcement training course for Massachusetts law-enforcement personnel. The Massachusetts Criminal Justice Training Council has submitted budget requests through the Governor's Highway Safety Bureau to fund this course, to be taught by the Institute of Police Technology and Management of the University of North Florida. The course would run for three days and certify forty law-enforcement personnel as instructors in bicycle safety and enforcement. Due to federal cutbacks in Highway Safety funds this program was not funded in FY'89. The Criminal Justice Training Center will try again to have this program funded in FY'90.

The Registry of Motor Vehicles

As part of its responsibilities in licensing and educating motorists, the Registry of Motor Vehicles places a strong emphasis on educating the motoring public on bicycle safety. The educational thrust considers both the bicyclists' need to learn and observe the rules of the road as they apply to bicycling, and to the motorists' responsibility to accord bicyclists the same rights and privileges accorded other road users. Each spring the Registry appeals to elementary and middle schools for assistance with maintaining safety for bicyclists by introducing or reinforcing previously taught units on bicycle safety.

Depending upon available resources the Registry has:

- * supplied schools with educational materials including suggested curricula and handouts;
- * offered to send speakers (RMV police officers) to present bicycle safety to the students;
- * assisted with locally organized bicycle-safety rodeos;
- * distributed lists of available teaching aids such as films;
- * mailed press releases to coincide with a Bike Safety Week to media outlets across the state announcing the availability of bicycle safety inspections at RMV branches during school-vacation week and listing bicycle-safety tips. The message the Registry attempts to convey to the motoring public is one of consideration and respect for the rights of bicyclists. Periodically, the Registry mails public-service announcements to radio stations across the state, and issues "Registry Tips" on bicycle safety to the print media.

The Department of Public Health

The Department of Public Health created the Statewide Comprehensive Injury Prevention Program (1979) to address the problem of injuries in Massachusetts. SCIPP is nationally recognized as an innovator in both the development of childhood-injury programs and in its research into the causes of injuries.

SCIPP is meeting its goal by developing strategies and training materials to help integrate injury prevention into ongoing public health services; serving as a center to coordinate prevention efforts and disseminate information; and researching causes of injuries. SCIPP's resources include training programs; hands-on instructional bits to be used by home-visiting professionals, elementary-school teachers and medical-and day-care providers; and a library of books, films, video tapes, slide tapes and curricula dealing with head-injury prevention.

SCIPP is committed to assisting agencies in integrating injury prevention into their ongoing services. The Department has developed a publication entitled "Safe School", a guide for elementary teachers, which recommends a specific bicycle-safety and-education curriculum for public schools, kindergarten through grade six.

The Department of Education

The Department serves as a resource to public-school systems in search of bicycle-safety and-education materials; refers questions on bicycle safety and education to known authorities; and encourages school systems to teach bicycle safety. However, since public-school funding is largely from local appropriations, and curriculum is developed by local school committees, the Department of Education cannot insist that bicycle safety be taught in public schools. Local school systems which receive "Comprehensive Health Education and Human Services Discretionary Grants" from the Department of Education are required to implement health and safety programs which could include bicycle safety.

BICYCLISTS' ORGANIZATIONS IN MASSACHUSETTS

Massachusetts has at least twenty bicyclists' organizations, with a membership of several thousand people. Though these are less than one percent of all people who ride bicycles, the organizations are the focus of many visible and organized bicycling events. Their members also tend to be the people most knowledgeable about bicycling and most concerned about maintaining and improving conditions for bicycling. There are several major types of bicyclists' organizations:

- * Racing clubs organize and promote bicycle racing and training for racing. These clubs are regional; each club draws from an area in which members can comfortably get to the club's events. Triathlon clubs which are not, strictly speaking, bicycle clubs, but they run bicycle races as part of the triathlons they sponsor.
- * Touring and recreational-riding clubs organize group day rides, overnight tours and rallies. Generally, these clubs are regional, like the racing clubs. Some clubs may have a special emphasis on one type of bicycle or riding, for example off-road riding.
- * The Greater Boston Council of American Youth Hostels is a unique organization which encourages low-cost travel, especially for young people. AYH maintains low-cost overnight accommodations for members and serves primarily bicyclists. The hostel network is unusually well-developed in Massachusetts, and many groups of bicycle tourists from bicycle clubs, YMCAs', Scouts and other such groups, as well as bicyclists traveling on their own, use hostels. AYH also runs a program of group bicycle rides, especially in the Boston area.

- * Bicyclists' advocacy organizations represent the political needs of bicyclists to government. The major example in Massachusetts is the Boston Area Bicycle Coalition. The Rails to Trails Coalition carries on a lobbying effort for the conversion of abandoned railroad lines to trails for hiking, bicycling and other uses. Many other bicyclists' organizations including racing and touring clubs carry on some advocacy work along with their other activities .
- * National bicyclists' organizations include the United States Cycling Federation, which coordinates bicycle racing; the League of American Wheelmen, composed mostly of recreational and touring cyclists, and which has a strong advocacy and bicyclist education program; and the national American Youth Hostels organization. All of these are affiliated with local bicyclists' organizations. There are several other national organizations without local subgroups, but with Massachusetts members; for examples the Bicycle Federation of America (mostly for transportation planners and bicycle coordinators in government positions) and Bikecentennial (organizes group tours and distributes maps and other touring information).

APPENDIX 1

REVIEW OF BICYCLE EXCLUSION POLICY

Massachusetts exclusion policy is fairly consistent; see 720 CMR 9.01, 720 CMR 9.08 and M.G.L. ch. 85 sec. 2 for relevant statutes and regulations. Essentially, bicycles may by law be prohibited only on limited-access or express state highways where signs are posted.

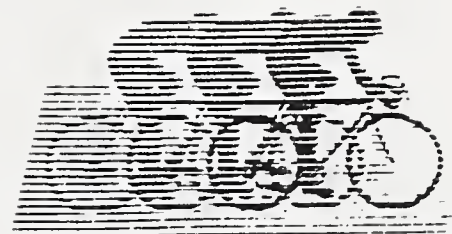
In 1986, information on bicycle exclusions was collected from DPW district engineers as part of the Massachusetts State Bikemap project. This information revealed that implementation of the policy has been inconsistent, particularly on roads not under the direct supervision of the DPW. Some roads and highways are posted but do not meet the requirements of the regulations, and there are unposted sections which the district engineers listed as posted. Many roads including parts of numbered highways are owned by towns and cities, the MDC or other commissions and authorities. It appears that these jurisdictions have sometimes posted bicycle exclusions without referring to the statutes and regulations.

Massachusetts needs a revised exclusion policy which reflects concerns of safety and access more accurately. This includes consistent posting of hazardous limited-access and express highways when an alternate route is available (and signing of the alternate route when bicyclists need to be directed to it), as well as the lifting of bicycle exclusions on limited-access roadways with wide shoulders when there is no good alternate route.

Title 23, section 109n of the U.S. code provides that "the Secretary [of Transportation] "shall not approve any project under this title [23 USCS ss 101 et seq.] that will result in the severance or destruction of an existing major route for nonmotorized transportation traffic and light motorcycles, unless such project provides a reasonable alternative route or such a route exists."

This policy must be the basis for consideration of bicycle exclusions in construction and maintenance projects, even when they do not receive Federal support. Usually, the most economical way to meet this requirement is to design and maintain for bicycle compatibility, rather than to build a separate bicycle facility. More research and specifics will follow on this issue.





Bicycle Advisory Board

APPENDIX 2

April 25, 1989
For Immediate Release

Contact: Daniel O'Brien
W 727-3160
H 447-1418

Have You Seen The Blue Helmets

The Massachusetts Bicycle Advisory Board is pleased to sponsor a " Role Model Bicycle Helmet Campaign " on Saturday April 29th at approximately 1:00 P.M. at the Wellesley Safety Fair, (Wellesley Green) located at the corner of Washington and Grove Streets in Wellesley.

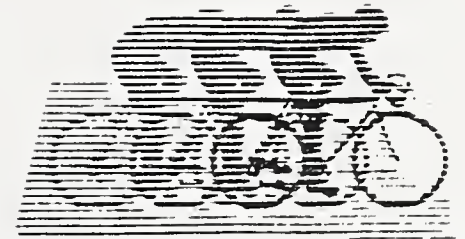
Twelve responsible bicyclists selected by the Wellesley Hills Junior Women's Club will volunteer to take a pledge to ride with full consideration of the rights of other road and sidewalk users, and with full observance of the traffic laws as they apply to bicyclists. The bicyclists will be presented with blue bicycle helmets signifying bicycle safety. These twelve bicyclists will act as role models, whose bicycling behavior on Massachusetts roads can be emulated by other bicyclists of all ages.

Press release sent to:

Boston Globe
Boston Herald
Wellesley Tab

press release

021091001 229707



Bicycle Advisory Board

APPENDIX 2

April 27, 1989
For Immediate Release

Contact: Daniel O'Brien
W 727-3160
H 447-1418

Have You Seen The Blue Helmets

The Massachusetts Bicycle Advisory Board is pleased to sponsor a "Role Model Bicycle Helmet Campaign" on Monday May 1st 8:30 A.M. at City Hall in Northampton.

Ten responsible bicyclists selected by the Northampton Saving Lives program have pledged to ride with full consideration of the rights of other road and sidewalk users, and with full observance of the traffic laws as they apply to bicyclists. The bicyclists will be presented with blue bicycle helmets signifying bicycle safety. These ten bicyclists will act as role models, whose bicycling behavior on Massachusetts roads can be emulated by other bicyclists of all ages.

Press release sent to:

Springfield Union
Northampton Gazzette

press release



Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Management



APPENDIX 3

CONTACT: Danny O'Brien
(617) 727-3160

Bicycle
Advisory Board
225 Friend Street
Boston,
Massachusetts
02114

MEDIA ADVISORY
PROCLAMATION CEREMONY
May 3, 1989
State House, Room 360
9:40 a.m.

WHO: Bicycle Advisory Board

WHAT: Twenty responsible bicyclists from Northampton and Wellesley will be wearing blue helmets as part of their pledge to serve as Role Models whose safe bicycling behavior can be emulated by other bicyclists in their communities. The Bicycle Advisory Board has organized a campaign to increase public awareness of bicycle safety and the use of bicycle helmets.

WHY: Recently concern over bicycle safety has risen due to the increasing number of cyclist deaths especially among children. In the last 10 years, the number of cyclist deaths has increased 27 percent. Children are the most frequent victims of bicycle accidents, and head injury is the most common cause of death. Every year in the United States approximately 600 children under age 15 die from bicycle crashes - 85 percent of them from head trauma. In Massachusetts, an estimated 14,118 children will receive bicycle-related injuries each year.

Bicycle helmets have proven effective in reducing injury to the head. A study in Seattle reported a 74 percent decline in head injuries among cyclists using bicycle helmets.

To launch the Board's Role Model Bicycle Helmet Campaign Governor Michael S. Dukakis will sign a Bicycle Safety Proclamation on May 3rd at 9:40 a.m. in room 360 of the State House. The press is welcome to attend.

5/1/89

Commonwealth
of Massachusetts

APPENDIX 4

List of Board Members

Members appointed by Governor Michael S. Dukakis

John S. Allen
John Allis
Carol Greenleaf
Edward S. Gross, M.D.
David Gordon Wilson

State Agency Representatives and Others

Gilbert Bliss, Executive Office of Environmental Affairs
Cathy Buckley, Central Transportation Planning Staff
John Fitzgerald, Department of Public Works
Kathleen Helsing, Department of Public Health
Betty Lam, Metropolitan District Commission
Muriel Lockwood, Bicycle Education Advocate
David Luce, Department of Public Works
Alan McClennen, Jr., Metropolitan Area Planning Commission
Gerard Murphy, Department of Public Safety
Daniel O'Brien, Department of Environmental Management
William Saltonstall, Bicycle Education Advocate
Diane Turner, Registry of Motor Vehicles

